

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2223880

Managing Division Abbreviation: DBI

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 08/05/2022

Amendment Number: 000

Proposal Number: 2223880

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2223880

Award Instrument: Standard Grant

Award Date: 08/05/2022

Award Period of Performance: Start Date: 09/15/2022 End Date: 08/31/2026

Project Title: Collaborative Research: Digitization and Enrichment of U.S. Herbarium Data from Tropical Africa to Enable Urgent Quantitative Conservation Assessments

Managing Division Abbreviation: DBI

Research and Development Award: Yes

Funding Opportunity: NSF 21-501 Infrastructure Capacity for Biological Research

Assistance Listing Number(s) and Name(s): 47.074 Biological Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$232,968

Total Intended Award Amount: \$232,968
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$232,968
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2223875	Y	[REDACTED]	University of Kansas Center for Research Inc.
2223876	N	[REDACTED]	The Regents of the University of California, Berkeley
2223877	N	[REDACTED]	Rancho Santa Ana Botanic Garden
2223878	N	[REDACTED]	Arizona Board of Regents Arizona State University
2223879	N	[REDACTED]	Missouri Botanical Garden
2223880	N	[REDACTED]	Harvard College, President & Fellows of Harvard University
2223881	N	[REDACTED]	The New York Botanical Garden

NSF CONTACT INFORMATION

Managing Grants Official (Primary Contact) Name: Christine Castell	Awarding Official Name: Christine Castell Email: ccastell@nsf.gov	Managing Program Officer Name: Reed Schiele Beaman Email: rsbeaman@nsf.gov
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Email:

ccastell@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-501 Infrastructure Capacity for Biological Research.

BUDGET

A. Senior Personnel	
Senior Personnel Count	16.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	3.00
Other Professionals Calendar Months	31.80
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$110,627
Graduate Students	

Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$110,627
C. Fringe Benefits	\$61,730
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$172,357
D. Equipment	\$0
E. Travel	
Domestic	\$1,500
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$0
H. Total Direct Costs (A Through G)	\$173,857
I. Indirect Costs*	\$59,111
J. Total Direct and Indirect Costs (H + I)	\$232,968
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$232,968

M. Cost Sharing Proposed Level	\$0
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*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	34.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2227964

Managing Division Abbreviation: IOS

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 03/29/2023

Amendment Number: 000

Proposal Number: 2227964

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 03/14/2023.

AWARD INFORMATION

Award Number (FAIN): 2227964

Award Instrument: Continuing Grant

Award Date: 03/29/2023

Award Period of Performance: Start Date: 04/01/2023 End Date: 03/31/2026

Project Title: Collaborative Research: Higher-order processing in a peripheral neural structure of a nudibranch mollusc

Managing Division Abbreviation: IOS

Research and Development Award: Yes

Funding Opportunity: NSF 21-506 Division of Integrative Organismal Systems Core Programs

Assistance Listing Number(s) and Name(s): 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$302,900
Total Intended Award Amount: \$326,200
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$302,900
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2025	\$23,300

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2227963	Y	[REDACTED]	University of Massachusetts
2227964	N	[REDACTED]	Harvard College, President & Fellows of Harvard University

NSF CONTACT INFORMATION

Managing Grants

Official (Primary Contact)
Name: Vanessa L. Richardson
Email: vlrichar@nsf.gov
Phone: (703) 292-4839

Awarding Official
Name: Vanessa L. Richardson
Email: vlrichar@nsf.gov

Managing Program Officer
Name: Quentin Gaudry
Email: qgaudry@nsf.gov
Phone: (703) 292-2903

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement

which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-506 Division of Integrative Organismal Systems Core Programs.

BUDGET

A. Senior Personnel	
Senior Personnel Count	2.00
Senior Personnel Calendar Months	0.40
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$13,956
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	1.00
Post Doctoral Calendar Months	24.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$118,000
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	

Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$131,956
C. Fringe Benefits	\$32,938
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$164,894
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$14,337
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$14,337
H. Total Direct Costs (A Through G)	\$179,231
I. Indirect Costs*	\$123,669
J. Total Direct and Indirect Costs (H + I)	\$302,900
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$302,900
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2228359

Managing Division Abbreviation: AGS

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 11/01/2022

Amendment Number: 000

Proposal Number: 2228359

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2228359

Award Instrument: Standard Grant

Award Date: 11/01/2022

Award Period of Performance: Start Date: 11/01/2022 End Date: 10/31/2025

Project Title: Collaborative Research: Development and Applications of GEOS-Chem Atmospheric Chemistry in CESM and MUSICA

Managing Division Abbreviation: AGS

Research and Development Award: Yes

Funding Opportunity: PD 98-1524 Atmospheric Chemistry

Assistance Listing Number(s) and Name(s): 47.050 Geosciences (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$718,313
Total Intended Award Amount: \$718,313
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$718,313
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

co-Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2228359	Y	[REDACTED]	Harvard College, President & Fellows of Harvard University
2228379	N	[REDACTED]	Massachusetts Institute of Technology

NSF CONTACT INFORMATION

Managing Grants

Official (Primary Contact)
Name: Meredith Whitty
Email: mwhitty@nsf.gov
Phone: (703) 292-2759

Awarding Official
Name: Meredith Whitty
Email: mwhitty@nsf.gov

Managing Program Officer
Name: Sylvia Edgerton
Email: sedgerto@nsf.gov
Phone: (703) 292-8522

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	0.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	3.00
Other Professionals Calendar Months	18.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$144,083
Graduate Students	
Graduate Students Count	3.00
Graduate Students Amount	\$132,951
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$277,034
C. Fringe Benefits	\$58,786
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$335,820
D. Equipment	\$0

E. Travel	
Domestic	\$50,715
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$6,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$54,928
<i>Total Other Direct Costs (G)</i>	\$60,928
H. Total Direct Costs (A Through G)	\$447,463
I. Indirect Costs*	\$270,850
J. Total Direct and Indirect Costs (H + I)	\$718,313
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$718,313
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2231707

Managing Division Abbreviation: CCF

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 02/09/2023

Amendment Number: 000

Proposal Number: 2231707

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2231707

Award Instrument: Standard Grant

Award Date: 02/09/2023

Award Period of Performance: Start Date: 06/01/2023 End Date: 05/31/2026

Project Title: Collaborative Research: CIF: Small: Approximate Coded Computing - Fundamental Limits of Precision, Fault-tolerance and Privacy

Managing Division Abbreviation: CCF

Research and Development Award: Yes

Funding Opportunity: NSF 21-616 Computer and Information Science and Engineering (CISE): Core Programs

Assistance Listing Number(s) and Name(s): 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$250,000
Total Intended Award Amount: \$250,000
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$250,000
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2231706	Y	[REDACTED]	The Pennsylvania State University
2231707	N	[REDACTED]	Harvard College, President & Fellows of Harvard University

NSF CONTACT INFORMATION

Managing Grants

Official (Primary

Contact)

Name: Sharon D. Glivens

Email: sglivens@nsf.gov

Phone: (703) 292-7837

Awarding Official

Name: Jannele L. Gosey

Email: jgosey@nsf.gov

Managing Program Officer

Name: James E Fowler

Email: jafowler@nsf.gov

Phone: (703) 292-8910

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-616 Computer and Information Science and Engineering (CISE): Core Programs.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	1.50
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$21,315
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	3.00
Post Doctoral Calendar Months	19.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$97,290
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$118,605
C. Fringe Benefits	\$29,324
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$147,929
D. Equipment	\$0

E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$0
H. Total Direct Costs (A Through G)	\$147,929
I. Indirect Costs*	\$102,071
J. Total Direct and Indirect Costs (H + I)	\$250,000
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$250,000
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Modified Total Direct Cost	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2234308

Managing Division Abbreviation: BCS

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 06/16/2023

Amendment Number: 000

Proposal Number: 2234308

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

No work with human subjects, including recruitment, may be conducted under this protocol or grant until IRB approval has been obtained.

AWARD INFORMATION

Award Number (FAIN): 2234308

Award Instrument: Standard Grant

Award Date: 06/16/2023

Award Period of Performance: Start Date: 07/01/2023 End Date: 06/30/2026

Project Title: Evolved changes to neural systems for reactive aggression in humans and other primates

Managing Division Abbreviation: BCS

Research and Development Award: Yes

Funding Opportunity: PD 98-1392 Biological Anthropology

Assistance Listing Number(s) and Name(s): 47.075 Social, Behavioral, and Economic Sciences
(Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$342,550
Total Intended Award Amount: \$342,550
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$342,550
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL**Principal Investigator:****Email:**

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION**Managing Grants Official**

(Primary Contact)

Name: Tyffani N. Smith**Email:** tnsmith@nsf.gov**Phone:** (703) 292-7046**Awarding Official****Name:** Willie M. Powell**Email:** wpowell@nsf.gov**Managing Program Officer****Name:** Rebecca Ferrell**Email:** rferrell@nsf.gov**Phone:** (703) 292-7850**GENERAL TERMS AND CONDITIONS**

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	1.50
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$17,075

B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	2.00
Post Doctoral Calendar Months	24.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$100,500
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	3.00
Graduate Students Amount	\$36,766
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$154,341
C. Fringe Benefits	\$29,199
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$183,540
D. Equipment	\$0
E. Travel	
Domestic	\$2,700
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0

Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$16,451
<i>Total Other Direct Costs (G)</i>	\$16,451
H. Total Direct Costs (A Through G)	\$202,691
I. Indirect Costs*	\$139,859
J. Total Direct and Indirect Costs (H + I)	\$342,550
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$342,550
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2238071

Managing Division Abbreviation: IOS

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 01/17/2023

Amendment Number: 000

Proposal Number: 2238071

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

It is the grantee's responsibility to ensure that any vertebrate animal work conducted under this award has Institutional Animal Care and Use Committee (IACUC) approval, where required, that the approval be from an organization that has a current Public Health Service-approved Animal Welfare Assurance, and that such approval remains valid at all times that vertebrate animal work is conducted under the award. See the NSF PAPPG Chapter II.D.4, for additional information. This condition extends to vertebrate animal work funded via use of a subaward. Failure to comply with this condition will result in suspension and/or termination of the award.

AWARD INFORMATION

Award Number (FAIN): 2238071

Award Instrument: Continuing Grant

Award Date: 01/17/2023

Award Period of Performance: Start Date: 03/01/2023 End Date: 02/29/2028

Project Title: CAREER: Integrating brain-behavior evolution with real-world science impacts through neuroscience of working dogs

Managing Division Abbreviation: IOS

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$225,291
Total Intended Award Amount: \$1,361,007
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$225,291
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2024	\$347,079
2025	\$353,597
2026	\$360,310
2027	\$74,730

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)

Name: Christine Castell

Email: ccastell@nsf.gov

Phone: (703) 292-4803

Awarding Official

Name: Christine Castell

Email: ccastell@nsf.gov

Managing Program Officer

Name: Colette Marie St. Mary

Email: cstmary@nsf.gov

Phone: (703) 292-4332

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early

Career Development Program.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	1.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$12,262
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	1.00
Other Professionals Calendar Months	0.84
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$10,920
Graduate Students	
Graduate Students Count	1.00
Graduate Students Amount	\$13,215
Undergraduate Students	
Undergraduate Students Count	2.00
Undergraduate Students Amount	\$16,320
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$52,717
C. Fringe Benefits	\$3,791

<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$56,508
D. Equipment	\$0
E. Travel	
Domestic	\$9,000
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$67,800
<i>Total Other Direct Costs (G)</i>	\$67,800
H. Total Direct Costs (A Through G)	\$133,308
I. Indirect Costs*	\$91,983
J. Total Direct and Indirect Costs (H + I)	\$225,291
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$225,291
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2238071

Managing Division Abbreviation: IOS

Amendment Number: 002

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Frwd Funded

Amendment Date: 08/26/2024

Amendment Number: 002

Proposal Number: 2448019

Amendment Description:

The purpose of this amendment is to forward fund scheduled incremental funding to the award in the amount shown below in the Funding Information section.

Except as modified by this amendment, the award conditions remain unchanged.

AWARD INFORMATION

Award Number (FAIN): 2238071

Award Instrument: Continuing Grant

Award Date: 01/17/2023

Award Period of Performance: Start Date: 03/01/2023 End Date: 02/29/2028

Project Title: CAREER: Integrating brain-behavior evolution with real-world science impacts through neuroscience of working dogs

Managing Division Abbreviation: IOS

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.074 Biological Sciences (See Amendment 000 for source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$353,597
Total Intended Award Amount: \$1,361,007
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$925,967

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)

Name: Termia M. Millard

Email: tmillard@nsf.gov

Phone: (703) 292-7074

Awarding Official

Name: Vanessa L. Richardson

Email: vlrichar@nsf.gov

Managing Program Officer

Name: Colette Marie St. Mary

Email: cstmary@nsf.gov

Phone: (703) 292-4332

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at <https://www.nsf.gov/awards/managing rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	1.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$13,009
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	1.00

Post Doctoral Calendar Months	12.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$57,845
Other Professionals	
Other Professionals Count	1.00
Other Professionals Calendar Months	0.84
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$11,585
Graduate Students	
Graduate Students Count	1.00
Graduate Students Amount	\$14,019
Undergraduate Students	
Undergraduate Students Count	2.00
Undergraduate Students Amount	\$17,314
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$113,772
C. Fringe Benefits	\$18,657
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$132,429
D. Equipment	\$0
E. Travel	
Domestic	\$9,000
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	

Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$67,800
<i>Total Other Direct Costs (G)</i>	\$67,800
H. Total Direct Costs (A Through G)	\$209,229
I. Indirect Costs*	\$144,368
J. Total Direct and Indirect Costs (H + I)	\$353,597
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$353,597
M. Cost Sharing Proposed Level	\$0

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2238113

Managing Division Abbreviation: DMR

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 12/20/2022

Amendment Number: 000

Proposal Number: 2238113

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Fiscal Year 2023 and 2024 budgets have been combined in this award. It is still the grantee's responsibility to submit an annual project report in accordance with the award terms and conditions.

AWARD INFORMATION

Award Number (FAIN): 2238113

Award Instrument: Continuing Grant

Award Date: 12/20/2022

Award Period of Performance: Start Date: 02/01/2023 End Date: 01/31/2028

Project Title: CAREER: Manipulating Barocaloric Effects in Two-Dimensional Perovskites

Managing Division Abbreviation: DMR

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences
(Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$314,670
Total Intended Award Amount: \$822,963
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$314,670
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2025	\$164,448
2026	\$169,382
2027	\$174,463

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Elizabeth

Gebremedhin

Email: egebreme@nsf.gov

Phone: (703) 292-4444

Awarding Official

Name: Elizabeth Gebremedhin

Email: egebreme@nsf.gov

Managing Program Officer

Name: Robert Meulenberg

Email: rmeulenb@nsf.gov

Phone: (703) 292-7106

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

BUDGET

A. Senior Personnel

Senior Personnel Count

2.00

Senior Personnel Calendar Months	1.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$13,958
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	4.00
Graduate Students Amount	\$123,505
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$137,463
C. Fringe Benefits	\$3,085
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$140,548
D. Equipment	\$0
E. Travel	
Domestic	\$2,030
International	\$0
F. Participant Support Costs	

Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$20,300
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$34,504
<i>Total Other Direct Costs (G)</i>	\$54,804
H. Total Direct Costs (A Through G)	\$197,382
I. Indirect Costs*	\$117,288
J. Total Direct and Indirect Costs (H + I)	\$314,670
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$314,670
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

From: bschwen @nsf.gov
Reply-To: bschwenz@nsf.gov
To: [REDACTED]
CC: bschwenz@nsf.gov; nodom@nsf.gov
Subject: NSF Approval of Continuing Grant Increment Award ID 2238113
Status: Sent on Mon 02/10/2025 06:34 PM

Notification of NSF Approval of Additional Funding Support

Award No. 2238113
Amendment No. 001
Division Identifier: DMR
Release Date: 02/10/2025
Released By: Birgit Schwenzer
Amount: \$164,448
Award End Date: 01/31/2028

As authorized by the original award, the National Science Foundation hereby releases \$164,448 for additional support of the award referenced above. The award, with this amendment, now totals \$479,118 and will end on 01/31/2028.

The attached budget indicates the amounts, by categories, on which NSF has based its continued support.

This award is subject to the terms and conditions referenced in the original award notice. The most current version of the terms and conditions can be accessed at: https://www.nsf.gov/awards/managing/award_conditions.jsp?org=NSF.

This award is subject to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance). NSF's implementation of the Uniform Guidance is contained in the Grant Conditions referenced in this award.

Any technical or programmatic questions regarding this notification should be addressed to the cognizant NSF Program Officer: Birgit Schwenzer , bschwenz@nsf.gov, (703)292-4771.

Any award specific questions of an administrative or financial nature should be addressed to the grants official at <http://www.nsf.gov/bfa/dga/docs/liaison.pdf>. The cognizant grants official can be identified by associating the three-letter division identifier referenced above with the grants official for that division on the liaison website.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2238714

Managing Division Abbreviation: IIS

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 02/13/2023

Amendment Number: 000

Proposal Number: 2238714

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Incentive payments or gifts to participants must be made in accordance with written institutional policies and procedures and supported by auditable documentation. The allowability of these costs will ultimately be based on the awardee institution's ability to adequately demonstrate that the incentives have been disbursed in accordance with its policies and procedures.

No work with human subjects, including recruitment, may be conducted under this protocol or grant until IRB approval has been obtained.

AWARD INFORMATION

Award Number (FAIN): 2238714

Award Instrument: Continuing Grant

Award Date: 02/13/2023

Award Period of Performance: Start Date: 08/01/2023 End Date: 07/31/2028

Project Title: Career: Towards a Systematic Characterization of Model Explanations for High-Stakes Decision Making

Managing Division Abbreviation: IIS

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$104,404
Total Intended Award Amount: \$550,664
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$104,404
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2024	\$107,188
2025	\$110,048
2026	\$112,995
2027	\$116,029

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)

Name: Tianay M. Robinson

Email: trobinso@nsf.gov

Phone: (703) 292-7859

Awarding Official

Name: Tianay M. Robinson

Email: trobinso@nsf.gov

Managing Program Officer

Name: Roger Mailler

Email: rmailler@nsf.gov

Phone: (703) 292-7982

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early

Career Development Program.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	1.00
Graduate Students Amount	\$43,970
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$43,970
C. Fringe Benefits	\$0

<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$43,970
D. Equipment	\$0
E. Travel	
Domestic	\$1,500
International	\$2,000
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$21,765
<i>Total Other Direct Costs (G)</i>	\$21,765
H. Total Direct Costs (A Through G)	\$69,235
I. Indirect Costs*	\$35,169
J. Total Direct and Indirect Costs (H + I)	\$104,404
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$104,404
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC TDC less Tuition	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

From: eplaku@nsf.gov
Reply-To: eplaku@nsf.gov
To: [REDACTED]
CC: eplaku@nsf.gov; swolley@nsf.gov
Subject: NSF Approval of Continuing Grant Increment Award ID 2238714
Status: Sent on Thu 08/29/2024 10:07 AM

Notification of NSF Approval of Additional Funding Support

Award No. 2238714
Amendment No. 001
Division Identifier: IIS
Release Date: 08/29/2024
Released By: Erion Plaku
Amount: \$107,188
Award End Date: 07/31/2028

As authorized by the original award, the National Science Foundation hereby releases \$107,188 for additional support of the award referenced above. The award, with this amendment, now totals \$211,592 and will end on 07/31/2028.

The attached budget indicates the amounts, by categories, on which NSF has based its continued support.

This award is subject to the terms and conditions referenced in the original award notice. The most current version of the terms and conditions can be accessed at: https://www.nsf.gov/awards/managing/award_conditions.jsp?org=NSF.

This award is subject to the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance). NSF's implementation of the Uniform Guidance is contained in the Grant Conditions referenced in this award.

Any technical or programmatic questions regarding this notification should be addressed to the cognizant NSF Program Officer: Erion Plaku, eplaku@nsf.gov, (703)292-4426.

Any award specific questions of an administrative or financial nature should be addressed to the grants official at <http://www.nsf.gov/bfa/dga/docs/liaison.pdf>. The cognizant grants official can be identified by associating the three-letter division identifier referenced above with the grants official for that division on the liaison website.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2238836

Managing Division Abbreviation: CCF

Amendment Number: 001

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Supplement

Amendment Date: 06/08/2023

Amendment Number: 001

Proposal Number: 2329694

Amendment Description:

The purpose of this amendment is to:

- Add supplemental support to the award in the amount shown below in the Funding Information section.

The "Administration of NSF Conference or Group Travel Award Grant Conditions (FL 26)" in effect the date of this amendment are applicable. The FL 26 special award conditions can be found at: https://www.nsf.gov/awards/managing/special_conditions.jsp.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

Costs of entertainment, amusement, diversion and social activities, and any costs directly associated with such activities (such as meals, lodging, rentals, transportation and gratuities) are unallowable.

When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals. Grant funds may also be used to furnish a reasonable amount of coffee or soft drinks for conference or meeting participants and attendees during coffee breaks.

No NSF funds may be spent on meals or coffee breaks for intramural meetings of an organization or any

of its components, including, but not limited to, laboratories, departments and centers.

Except as modified by this amendment, the award conditions remain unchanged.

AWARD INFORMATION

Award Number (FAIN): 2238836

Award Instrument: Continuing Grant

Award Date: 01/30/2023

Award Period of Performance: Start Date: 02/15/2023 End Date: 01/31/2028

Project Title: CAREER: Complexity of quantum many-body systems: learnability, approximations, and entanglement

Managing Division Abbreviation: CCF

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.079 Office of International Science and Engineering
(See Amendment 000 for source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$30,000

Total Intended Award Amount: \$494,000

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$103,485

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)

Name: Sharon D. Glivens

Email: sglivens@nsf.gov

Phone: (703) 292-7837

Awarding Official

Name: Jannele L. Gosey

Email: jgosey@nsf.gov

Managing Program Officer

Name: Almadena Y.

Chtchelkanova

Email: achtchel@nsf.gov

Phone: (703) 292-7498

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and

NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0

Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$0
C. Fringe Benefits	\$0
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$0
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$18,000
Participant Support Costs Travel	\$12,000
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	3.00
<i>Total Participant Costs (F)</i>	\$30,000
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$0
H. Total Direct Costs (A Through G)	\$30,000
I. Indirect Costs*	\$0
J. Total Direct and Indirect Costs (H + I)	\$30,000
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$30,000
M. Cost Sharing Proposed Level	\$0

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2238836

Managing Division Abbreviation: CCF

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 01/30/2023

Amendment Number: 000

Proposal Number: 2238836

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

AWARD INFORMATION

Award Number (FAIN): 2238836

Award Instrument: Continuing Grant

Award Date: 01/30/2023

Award Period of Performance: Start Date: 02/15/2023 End Date: 01/31/2028

Project Title: CAREER: Complexity of quantum many-body systems: learnability, approximations, and entanglement

Managing Division Abbreviation: CCF

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.070 Computer and Information Science and

Engineering (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$73,485
Total Intended Award Amount: \$494,000
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$73,485
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2024	\$84,232
2025	\$109,098
2026	\$112,065
2027	\$115,120

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)

Name: Sharon D. Glivens

Email: sglivens@nsf.gov

Phone: (703) 292-7837

Awarding Official

Name: Jannele L. Gosey

Email: jgosey@nsf.gov

Managing Program Officer

Name: Almadena Y.

Chtchelkanova

Email: achtchel@nsf.gov

Phone: (703) 292-7498

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

BUDGET**A. Senior Personnel**

Senior Personnel Count	1.00
Senior Personnel Calendar Months	1.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$15,327

B. Other Personnel**Post Doctoral Scholars**

Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0

Other Professionals

Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0

Graduate Students

Graduate Students Count	5.00
Graduate Students Amount	\$18,035

Undergraduate Students

Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0

Secretarial - Clerical

Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0

Other

Other Count	0.00
Other Amount	\$0

Total Salaries and Wages (A+B)

\$33,362

C. Fringe Benefits

\$3,387

Total Salaries, Wages, Fringe Benefits (A + B + C)

\$36,749

D. Equipment

\$0

E. Travel

Domestic	\$2,500
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$2,000
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$3,774
<i>Total Other Direct Costs (G)</i>	\$5,774
H. Total Direct Costs (A Through G)	\$45,023
I. Indirect Costs*	\$28,462
J. Total Direct and Indirect Costs (H + I)	\$73,485
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$73,485
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2239234

Managing Division Abbreviation: DMS

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 12/28/2022

Amendment Number: 000

Proposal Number: 2239234

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2239234

Award Instrument: Continuing Grant

Award Date: 12/28/2022

Award Period of Performance: Start Date: 07/01/2023 End Date: 06/30/2028

Project Title: CAREER: Statistical Inference in High Dimensions using Variational Approximations

Managing Division Abbreviation: DMS

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences
(Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$86,479

Total Intended Award Amount: \$434,135
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$86,479
Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2024	\$83,381
2025	\$85,414
2026	\$87,508
2027	\$91,353

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization:

PRESIDENT AND
FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Lynda Kummelt

Email: lkummelt@nsf.gov

Phone: (703) 292-7721

Awarding Official

Name: Aprile N Roberson

Email: aroberso@nsf.gov

**Managing Program
Officer**

Name: Edsel A Pena

Email: epena@nsf.gov

Phone: (703) 292-8080

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

BUDGET

A. Senior Personnel

Senior Personnel Count	1.00
Senior Personnel Calendar Months	1.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$15,478
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	1.00
Graduate Students Amount	\$20,022
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$35,500
C. Fringe Benefits	\$3,421
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$38,921
D. Equipment	\$0
E. Travel	
Domestic	\$3,000
International	\$4,000
F. Participant Support Costs	

Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$3,000
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$2,250
<i>Total Other Direct Costs (G)</i>	\$5,250
H. Total Direct Costs (A Through G)	\$51,171
I. Indirect Costs*	\$35,308
J. Total Direct and Indirect Costs (H + I)	\$86,479
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$86,479
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2239242

Managing Division Abbreviation: AGS

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 03/10/2023

Amendment Number: 000

Proposal Number: 2239242

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2239242

Award Instrument: Standard Grant

Award Date: 03/10/2023

Award Period of Performance: Start Date: 03/15/2023 End Date: 02/29/2028

Project Title: CAREER: Using Tracer Interrelationships to Understand Large-Scale Geophysical Flows and their Changes

Managing Division Abbreviation: AGS

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.050 Geosciences (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$897,379
Total Intended Award Amount: \$897,379
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$897,379
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Meredith Whitty

Email: mwhitty@nsf.gov

Phone: (703) 292-2759

Awarding Official

Name: Willie M. Powell

Email: wpowell@nsf.gov

Managing Program Officer

Name: Varavut Limpasuvan

Email: vlimpasu@nsf.gov

Phone: (703) 292-2746

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

BUDGET

A. Senior Personnel	
Senior Personnel Count	5.00
Senior Personnel Calendar Months	5.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$74,865

B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	8.00
Graduate Students Amount	\$307,920
Undergraduate Students	
Undergraduate Students Count	2.00
Undergraduate Students Amount	\$16,320
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	1.00
Other Amount	\$8,320
<i>Total Salaries and Wages (A+B)</i>	\$407,425
C. Fringe Benefits	\$18,160
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$425,585
D. Equipment	\$0
E. Travel	
Domestic	\$49,719
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0

Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$15,000
Consultant Services	\$12,480
Computer Services	\$0
Subawards	\$0
Other	\$47,673
<i>Total Other Direct Costs (G)</i>	\$75,153
H. Total Direct Costs (A Through G)	\$550,457
I. Indirect Costs*	\$346,922
J. Total Direct and Indirect Costs (H + I)	\$897,379
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$897,379
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2239242

Managing Division Abbreviation: AGS

Amendment Number: 001

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Supplement

Amendment Date: 11/14/2024

Amendment Number: 001

Proposal Number: 2445836

Amendment Description:

The purpose of this amendment is to:

- Add supplemental support to the award in the amount shown below in the Funding Information section.

Except as modified by this amendment, the award conditions remain unchanged.

AWARD INFORMATION

Award Number (FAIN): 2239242

Award Instrument: Standard Grant

Award Date: 03/10/2023

Award Period of Performance: Start Date: 03/15/2023 End Date: 02/29/2028

Project Title: CAREER: Using Tracer Interrelationships to Understand Large-Scale Geophysical Flows and their Changes

Managing Division Abbreviation: AGS

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.050 Geosciences (See Amendment 000 for source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$48,964
Total Intended Award Amount: \$897,379
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$946,343

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Staci Jenkins

Email: sjenkins@nsf.gov

Phone: (703) 292-5042

Awarding Official

Name: Termia M. Talbert

Email: ttalbert@nsf.gov

Managing Program Officer

Name: Yolande L. Serra

Email: yserra@nsf.gov

Phone: (703) 292-2651

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to NSF Grant General Conditions (GC-1), dated 10/01/2024, available at https://www.nsf.gov/awards/managing/general_conditions.jsp.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	3.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$24,240
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00

Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$24,240
C. Fringe Benefits	\$4,733
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$28,973
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0

Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$0
H. Total Direct Costs (A Through G)	\$28,973
I. Indirect Costs*	\$19,991
J. Total Direct and Indirect Costs (H + I)	\$48,964
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$48,964
M. Cost Sharing Proposed Level	\$0

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2239780

Managing Division Abbreviation: IIS

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 09/11/2023

Amendment Number: 000

Proposal Number: 2239780

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

AWARD INFORMATION

Award Number (FAIN): 2239780

Award Instrument: Standard Grant

Award Date: 09/11/2023

Award Period of Performance: Start Date: 10/01/2023 End Date: 09/30/2028

Project Title: CAREER: Developing Neural Network Theory for Uncovering How the Brain Learns

Managing Division Abbreviation: IIS

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.070 Computer and Information Science and Engineering (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$602,466

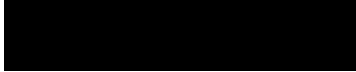
Total Intended Award Amount: \$602,466
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$602,466
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator:



Email:



Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)

Name: Tianay M. Robinson

Email: trobinso@nsf.gov

Phone: (703) 292-7859

Awarding Official

Name: Tianay M. Robinson

Email: trobinso@nsf.gov

Managing Program Officer

Name: Kenneth C. Whang

Email: kwhang@nsf.gov

Phone: (703) 292-5149

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at [https://www.nsf.gov/awards/managing/rtc.jsp](https://www.nsf.gov/awards/managing rtc.jsp).

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-586 Faculty Early Career Development Program.

BUDGET

A. Senior Personnel	
Senior Personnel Count	5.00
Senior Personnel Calendar Months	5.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$76,228
B. Other Personnel	

Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	5.00
Graduate Students Amount	\$191,709
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$267,937
C. Fringe Benefits	\$16,847
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$284,784
D. Equipment	\$0
E. Travel	
Domestic	\$20,000
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$1,500
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	1.00

<i>Total Participant Costs (F)</i>	\$1,500
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$85,880
<i>Total Other Direct Costs (G)</i>	\$85,880
H. Total Direct Costs (A Through G)	\$392,164
I. Indirect Costs*	\$210,302
J. Total Direct and Indirect Costs (H + I)	\$602,466
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$602,466
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
F&A	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2239795

Managing Division Abbreviation: PHY

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 04/26/2023

Amendment Number: 000

Proposal Number: 2239795

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

AWARD INFORMATION

Award Number (FAIN): 2239795

Award Instrument: Continuing Grant

Award Date: 04/26/2023

Award Period of Performance: Start Date: 05/01/2023 End Date: 04/30/2028

Project Title: CAREER: Towards Particle Physics Discoveries With Double Cascades In IceCube and Beyond

Managing Division Abbreviation: PHY

Research and Development Award: Yes

Funding Opportunity: NSF 22-586 Faculty Early Career Development Program

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences